

What is claimed is:

1. A process for electroless copper plating comprising:
  - 1) depositing a palladium on a resin substrate; and
  - 2) treating the resin substrate with a formaldehyde-free electroless copper plating solution, which solution comprises a copper ion and a reducing agent and, wherein no catalyst accelerating treatment is carried out after performing said catalyst depositing treatment.
2. The process of claim 1 wherein the palladium catalyst is a palladium-tin catalyst.
3. The process for electroless copper plating according to claim 1 or 2 wherein the electroless copper plating solution further comprises a complexing agent.
4. The process for electroless copper plating according to any one of claims 1 through 3 wherein the reducing agent is selected from a group consisting of sodium boron hydride, potassium boron hydride, dimethylamino borane, trimethylamino borane, hydrazine, derivatives of these compounds and a mixture thereof.
5. The process for electroless copper plating according to any one of claims 1 to 4, wherein the electroless copper plating solution further comprises a water-soluble cerium compound, a water-soluble thallium and/or a water-soluble

sulfide.

6. The process for electroless copper plating according to any one of claims 1 to 5, wherein the electroless copper plating solution further comprises iodine and/or a water-soluble iodine compound.

7. The process for electroless copper plating according to any one of claims 1 to 6, wherein the electroless copper plating solution further comprises hydantoin and/or a hydantoin derivative.

8. The process for electroless copper plating according to any one of claims 1 to 7, wherein the deposition rate of copper is 0.05 micrometer/minute or more.

9. An electroless copper plating solution used in the process for electroless copper plating according to any one of claims 1 to 8.

10. An electroless plating system, comprising a resin substrate disposed in a plating solution of claim 9.

11. A composite material prepared by the process according to any one of claims 1 to 8.

12. The composite material according to claim 11, wherein the thickness of the copper layer deposited on the resin substrate is 0.05 micrometer or more.

13. A process for electro plating copper characterized by further applying an electro copper plating on the composite material according to claim 11 or 12.

14. A composite material prepared by the process in accordance with claim 13.